



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,911	09/19/2003	Kazumoto Shinojima	9319S-000551	6489
27572	7590	09/08/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			CHIEM, DINH D	
			ART UNIT	PAPER NUMBER
			2883	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/666,911	SHINOJIMA, KAZUMOTO <i>[Signature]</i>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 June 2005.
- 2a) This action is **FINAL**.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) 3-10 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2 and 11-20 is/are rejected.
- 7) Claim(s) 20 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 7/25/05.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

This office action is in response to Applicant's amendment filed on June 22, 2005.

Currently, claims 1-2, and 11-20 are pending.

### ***Information Disclosure Statement***

The Non Patent Literature document filed on July 25, 2005 along with the Foreign References is not considered since Applicant does not include a concise explanation of the relevance and the document is also not in English, all other Foreign References are considered, see attached US Form 1449.

### ***Claim Objections***

1. Claim 20 is objected to because of the following informalities: the recitation—*the illuminating means comprises the light-guide equivalent to the support unit and a light source*—is unclear. The Examiner cannot determine the equivalency. Appropriate correction is required. For the purpose of examination, the Examiner shall interpret the claim recitation of the illuminating means comprises a light-guide plate, a support unit, and a light source.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-2 and 11-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshii et al. (US 6,147,724 A). In Fig. 4A and 4B, Yoshii disclose an electro-optical device comprising:

Art Unit: 2883

an electro-optical panel having an electro-optical material; a holding member SHD for holding the electro-optical panel SUB1; a light guide plate GLB illuminating the electro-optical panel GLB; a wiring circuit board FPC2 (b) disposed in the rear of the light-guide plate GLB; a circuit board IC1 mounting the electro-optical panel SUB1; and a conductive terminal disposed between the wiring circuit board and the circuit board (col. 11, line 47), wherein the terminal FPC2 (a) is made of a conductor which is elastically deformable and substantially in a contacting direction to the circuit board. The device further comprising a fixing structure for fixing the holding member on a mounting surface of the circuit board at the arrangement position (Fig. 4A, SHD).

Regarding claim 11, the electronic instrument comprising an electro-optical device and the circuit board IC1 mounting on the electro-optical device and having an opposing terminal, SUB1, which is brought into conductive contact, through SUB1 having an anisotropic conductive film to supply electricity and drive signals (col. 11, lines 55-56), with the terminal and controlling means for controlling the electro-optical device.

Claim 12 broadly claims the—*circuit board comprises a connector mounted thereon and having an opposing terminal*—it is reasonable to broadly interpret the connector as the electrode leads on an integrated circuit such as the IC1 taught by Yoshii.

Regarding claims 13-14, the mounting terminal in which the connector is brought into conductive contact with the circuit board may be broadly interpret the substrate upon which the leads are formed and the leads have a shape extending in the predetermined direction, toward other electrical leads.

Regarding claims 15-18, the terminal is disposed on a surface inclined in a predetermined direction relative to an arrangement position of the holding member. See Figure 5A and element

FPC2 (a). The terminal has a shape extending in the predetermined direction. Yoshii teaches that FPC2 (a) is a flexible printed circuit, thus comprises electrical terminals. The circuit board is supported on the surface SUP. Support plate SUP is a hard place such as glass epoxy board that is at least part of illuminating means for illuminating the electro-optical panel.

Regarding claims 19-20, the illuminating means comprises a light-guide plate GLB, a support unit (SUP, SHD) and a light source LP for introducing light inside the light-guide plate GLB from an edge of the light-guide plate, wherein the thickness of the light-guide plate gradually decreases in the predetermined direction (Fig. 26B; SF3, light incident surface), and wherein the light source is arranged to oppose an edge of the light-guide plate disposed in a direction opposite to the predetermined direction.

*Response to Arguments*

2. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erin D. Chiem whose telephone number is (571) 272-3102. The examiner can normally be reached on Monday - Thursday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Erin D Chiem  
Examiner  
Art Unit 2883

Frank G. Font  
Supervisory Primary Examiner  
Technology Center 2800